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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005			AMINI, JAVID A	
			ART UNIT	PAPER NUMBER
			2672	
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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/821,172

Applicant(s)

HIGGINS ET AL.

Examiner

Javid A Amini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☒ Claim(s) 1-21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 25, 2003 has been entered.

***Response to Amendment***

The amendment filed on July 23, 2003, has been considered but is ineffective to overcome the Schipper and Delorme references.

- Response to Request For Reconsideration (RFR) on page 2, lines 11-15: Applicant argues that “the Examiner appears to admit that Schipper fails to disclose the step of receiving a user annotation at a first location on a first map, but he provides that the step of user annotation is obvious because at a location on the first map will update a second map, and this can be considered as a manipulation or annotation.” Examiner’s reply: From office action dated April 23, 2003 at page 5: Schipper does not explicitly specify the term “user interaction”. But Schipper on col. 4, lines 7-13, teaches an interactive automated mapping system that uses location information determined using a GPS is disclosed by Mauney et al in U.S. Pat. No. 5,214,757. Attributes related to location information can be entered, stored and subsequently displayed. The system creates new maps and/or annotates existing maps. Therefore the step of claim 1 should be inherent.

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- Response to RFR on page 3, lines 14-24: Applicant argues that there is no suggestion that the device in Schipper could perform its function by relying on a user annotation at a first location on the map. Examiner's reply: on col. 5, lines 20-33, the invention reconciles the possibly inconsistent information provided by the old map and by the LDS coordinates by the following approach. It is assumed that the user is near enough to land (or on land) so that two or more spaced apart physical landmarks can be identified. An old map for a region of interest may be used manually or may be entered as an electronic map, using the location coordinates provided with this map. When a location fix is needed, the user obtains LDS-based range and azimuth measurements from the present user location to two, three, four or more selected physical landmarks for which location coordinates are available on the old map. The old map may represent a two-dimensional surface, such as a portion of the Earth's surface, or may represent a three-dimensional region.
- Response to RFR on page 4, lines 20-24: Applicant argues that in rejection of claims 17, 18 and 20, the Examiner incorrectly relies on the limitations recited in claim 1. Examiner's reply: Applicant must provide the complete specification of "an apparatus", "a computer readable medium" and "a system" in order to be able to examine them in a different scope.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21 rejected under 35 U.S.C. 102(b) as being anticipated by Schipper.

**1. Claim 1,**

As per claim 1, line 5, “A system for automatically manipulating or annotating a second map when a first map is manipulated or annotated, the system comprising: a map display; a map processing platform in communication with the map display, wherein said map processing platform is adapted to: receive a user annotation at a first location on a first map; and update a second map with the user annotation at a location on the second map that corresponds to said first location; a storage platform coupled to the map processing platform; and a user interaction device coupled to the map processing platform.”, Schipper teaches in (col. 6, lines 24-30) Table 1 presents the location coordinates, both known and unknown, for locations as determined by the LDS and the corresponding locations as shown on the old map, in two dimensions. Where only two visible landmarks L1' and L2' with location coordinates (x1',y1') and (x2',y2') are shown on the old map, the corresponding LDS-determined location coordinates are (x1,y1) and (x2,y2), respectively. The step of manipulated or annotated is inherent, because at a location on the first map (old map) will update a second map (new map), this considers as a manipulation or annotation. Schipper teaches in (col. 33, lines 63-67) the object location can be stored in an on-board memory, together with indicia identifying the object, or the object location and object indicia can be transmitted to a receiver for storage and/or further signal processing.

**2. Claim 3,**

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As per claim 3, “the map display is coupled to a graphics adapter”, this step is inherent, because map processing platform (called VGA controllers) is consisting of: CPU, memory, operating system, motherboard and map display (called monitors) is consisting of a motherboard, CPU, memory, integrated circuits, board level programming and etc., this configuration is part of the integration of a simple computer. And communication is main function of these hardware and software.

**3. Claim 4,**

As per claim 4, “the processing platform is a microprocessor”, the step is inherent, because all processing platforms equipped with a microprocessor see Fig. 10 of Schipper.

**4. Claim 5,**

As per claim 5, “the map processing platform is an application service provider”, this step is inherent because Schipper provides the location of a user from old map into the new map, therefore this can be called service provider platform.

**5. Claim 7,**

As per claim 7, “the storage platform comprises cached memory”, the step is inherent, because in order to accomplish faster transaction between storage platforms and display since last decade the chipmakers designed cashed memory inside CPU and storage systems.

**6. Claim 8,**

As per claim 8, “the storage platform comprises system memory”, the step is inherent, because Schipper teaches in (col. 33, lines 63-67) the object location is then determined from knowledge of the SATPS antenna location and the offset information. The object location can be stored in

an on-board memory, together with indicia identifying the object, or the object location and object indicia can be transmitted to a receiver for storage and/or further signal processing.

**7. Claim 10,**

As per claim 10, “the user interaction device comprises a mouse”, the step is inherent, because Schipper in Fig. 10 teaches the using a keyboard or other data entry device 113 (for example a mouse).

**8. Claim 15,**

As per claim 15, “the storage platform maintains code that enables the automatic manipulation of a second map when a first map is manipulated by: determining a boundary of a geographic region of a first map; converting the boundary of the geographic region of the first map into a corresponding boundary of a second map; and is configuring the boundary of the second map for display”, Schipper in col. 27, lines 19-30, teaches the step of claim language of claim 15, and also see col. 28, lines 58-67. The step of “configuring the boundary of the second map for display” is inherent, because Schipper in col. 1, lines 43-53, and in Fig. 10 step 115.

**9. Claim 16,**

As per claim 16, “the storage platform maintains code that enables the automatic manipulation of a second map when a first map is manipulated by: determining a boundary of a geographic region of a first map; converting the boundary of the geographic region of the first map into a corresponding boundary of a second map; configuring the boundary of the second map for display”, Schipper in col. 27, lines 19-30, teaches the step of claim language of claim 15, and also see col. 28, lines 58-67. The step of “configuring the boundary of the second map for display” is inherent, because Schipper in col. 1, lines 43-53, and in Fig. 10 step 115. The steps of

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“receiving a selection of a first region of a first map; and receiving an interaction for multiple map manipulation by providing a user interaction with a map” are inherent because Schipper in col. 1, lines 54-61 teaches the limitations.

**10. Claim 17,**

As per claim 17, “An apparatus capable of manipulating a map comprising: means for determining a boundary of a geographic region of a first map; means for converting the boundary of the geographic region of the first map into a corresponding boundary of a second map; and means for configuring the boundary of the second map for display”, Schipper teaches in (col. 6, lines 24-30) Table 1 presents the location coordinates, both known and unknown, for locations as determined by the LDS and the corresponding locations as shown on the old map, in two dimensions. Where only two visible landmarks L1' and L2' with location coordinates (x1',y1') and (x2',y2') are shown on the old map, the corresponding LDS-determined location coordinates are (x1,y1) and (x2,y2), respectively. The step of user annotation is inherent, because at a location on the first map (old map) will update a second map (new map), this can be considered as a manipulation or annotation. Schipper teaches in (col. 33, lines 63-67) the object location can be stored in an on-board memory, together with indicia identifying the object, or the object location and object indicia can be transmitted to a receiver for storage and/or further signal processing.

**11. Claim 18,**

As per claim 18, “detecting an annotation entry on the first map; associating the annotation entry with a set of first map coordinates; associating the set of the first map coordinates with a set of second map coordinates; and enabling the display of the annotation entry on the second



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map”, Schipper teaches in (col. 6, lines 24-30) Table 1 presents the location coordinates, both known and unknown, for locations as determined by the LDS and the corresponding locations as shown on the old map, in two dimensions. Where only two visible landmarks L1' and L2' with location coordinates (x1',y1') and (x2',y2') are shown on the old map, the corresponding LDS-determined location coordinates are (x1,y1) and (x2,y2), respectively. The step of user annotation is inherent, because at a location on the first map (old map) will update a second map (new map), this can be considered as a manipulation or annotation. Schipper teaches in (col. 33, lines 63-67) the object location can be stored in an on-board memory, together with indicia identifying the object, or the object location and object indicia can be transmitted to a receiver for storage and/or further signal processing.

**12. Claim 19,**

As per claim 19, “associating the set of first map coordinates locates the annotation entry within the second map such that the set of second map coordinates correspond geographically to the location of the annotation as defined by the set of first map coordinates”, Schipper teaches in (col. 6, lines 24-30) Table 1 presents the location coordinates, both known and unknown, for locations as determined by the LDS and the corresponding locations as shown on the old map, in two dimensions. Where only two visible landmarks L1' and L2' with location coordinates (x1',y1') and (x2',y2') are shown on the old map, the corresponding LDS-determined location coordinates are (x1,y1) and (x2,y2), respectively. The step of user annotation is inherent, because at a location on the first map (old map) will update a second map (new map), this can be considered as a manipulation or annotation. Schipper teaches in (col. 33, lines 63-67) the object location can be stored in an on-board memory, together with indicia identifying the object, or the

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object location and object indicia can be transmitted to a receiver for storage and/or further signal processing.

**13. Claim 20,**

As per claim 20, “detecting an annotation entry on the first map; associating the annotation entry with a set of first map coordinates; associating the set of the first map coordinates with a set of second map coordinates; and enabling the display of the annotation entry on the second map”, Schipper teaches in (col. 6, lines 24-30) Table 1 presents the location coordinates, both known and unknown, for locations as determined by the LDS and the corresponding locations as shown on the old map, in two dimensions. Where only two visible landmarks L1' and L2' with location coordinates (x1',y1') and (x2',y2') are shown on the old map, the corresponding LDS-determined location coordinates are (x1,y1) and (x2,y2), respectively. The step of user annotation is inherent because at a location on the first map (old map) will update a second map (new map), this can be considered as a manipulation or annotation. Schipper teaches in (col. 33, lines 63-67) the object location can be stored in an on-board memory, together with indicia identifying the object, or the object location and object indicia can be transmitted to a receiver for storage and/or further signal processing.

**14. Claim 21.**

As per claim 21, “The system for automatically manipulating or annotating a second map of claim 1, wherein the map processing platform is adapted to: receive a user manipulation of a first map; and implement the user manipulation on a second map”, Schipper teaches in (col. 6, lines 24-30) Table 1 presents the location coordinates, both known and unknown, for locations as determined by the LDS and the corresponding locations as shown on the old map, in two

dimensions. Where only two visible landmarks L1' and L2' with location coordinates (x1',y1') and (x2',y2') are shown on the old map, the corresponding LDS-determined location coordinates are (x1,y1) and (x2,y2), respectively. The step of user annotation is inherent because at a location on the first map (old map) will update a second map (new map), this can be considered as a manipulation or annotation. Schipper teaches in (col. 33, lines 63-67) the object location can be stored in an on-board memory, together with indicia identifying the object, or the object location and object indicia can be transmitted to a receiver for storage and/or further signal processing.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 6, 9 and 11-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Schipper, and further in view of DeLorme.

#### **15. Claim 2,**

As per claim 2, "The system of claim 1 wherein the map display is enabled to display a first map in a first area of the map display and to display a second map in a second area of the map display", Schipper does not explicitly illustrate map display, but Delorme illustrates in Fig.6. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Delorme into Schipper in order to the invention relates to a

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new computer aided map location system (CAMLS) using a coating personal digital assistant (PDA) or other digital or electronic computer (EC) such as a digital microprocessor based personal computer (PC), workstation, or mainframe, and a set of detailed printed maps depicting surface features or map able features for a specified geographical area, typically a set of printed paper maps. The PDA/PC/EC can be either stationary or mobile. The PDA/PC/EC permits generalized display of grid quadrangles of a constant scale grid system representing a specified geographical area and any of a selected group of latitude/longitude located objects. See Fig. 6. of DeLorme.

**16. Claim 6,**

As per claim 6, "the map processing platform is located remotely from the map display", Schipper does not explicitly specify located remotely, however Delorme teaches in (col. 5, lines 11-16) the database sources can be internal or external, local or remote, using memory devices and diverse communications links to multiple database sources and service centers.

**17. Claim 9,**

As per claim 9, "The system of claim 1 wherein the storage platform comprises random access memory", the step is obvious, because Schipper specifies a memory, which has the same function, but Delorme teaches in Fig. 7 the RAM.

**18. Claim 11,**

As per claim 11, "the map processing platform and the map display are coupled via a network", Schipper does not explicitly specify located remotely, however Delorme teaches in (col. 5, lines 11-16) the database sources can be internal or external, local or remote, using memory devices and diverse communications links to multiple database sources and service centers.

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**19. Claim 12,**

As per claim 12, “the network is the internet”, the step is obvious because network can be considered as an Internet.

**20. Claim 13,**

As per claim 13, “the storage platform is associated with the map processing platform via a network”, Schipper does not explicitly specify located remotely, however Delorme teaches in (col. 5, lines 11-16) the database sources can be internal or external, local or remote, using memory devices and diverse communications links to multiple database sources and service centers.

**21. Claim 14,**

As per claim 14, “the network is the internet”, the step is obvious because network can be considered as an Internet.

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid A Amini  
Examiner  
Art Unit 2672

Javid Amini

  
JEFFERY BRIER  
PRIMARY EXAMINER